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(54) Title: METHOD OF ENHANCING PROLIFERATION AND/OR HEMATOPOIETIC DIFFERENTIATION OF STEM CELLS

(57) Abstract: The present invention provides a method for enhancing the proliferation and/or hematopoietic differentiation and/or maintenance of mammalian stem cells. The method is useful for generating expanded populations of hematopoietic stem cells (HSCs) and thus mature blood cell lineages. This is desirable where a mammal has suffered a decrease in hematopoietic or mature blood cells as a consequence of disease, radiation or chemotherapy. The method of the present invention comprises increasing the intracellular level of a *cdx* in stem cells, including hematopoietic stem cells, in culture, either by providing an exogenous *cdx* protein to the cell, or by introduction into the cell of a genetic construct encoding a *cdx*. The *cdx* is selected from the *cdx* family and includes *cdx1*, *cdx2*, or *cdx4*. The *cdx* may be a wild type protein appropriate for the species from which the cells are derived, or a mutant form of the protein.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/29185

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C12N 5/00, 5/02, 5/08

US CL : 435/325, 366, 372, 372.3, 377

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 435/325, 366, 372, 372.3, 377

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A,P	US 6,498,018 B1 (CARPENTER) 24 December 2002 (12.24.2002), see entire document.	1-34
A,E	US 6,645,763 B2 (KOBAYASHI et al.) 11 November 2003 (11.11.2003), see entire document.	1-34
A,P	US 2002/0164309 A1 (CARPENTER) 07 November 2002 (07.11.2002), see entire document.	1-34



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* Special categories of cited documents:

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Continuation of B. FIELDS SEARCHED Item 3:

EAST, STN (MEDLINE CAPLUS)

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